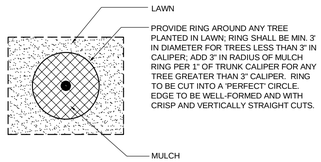
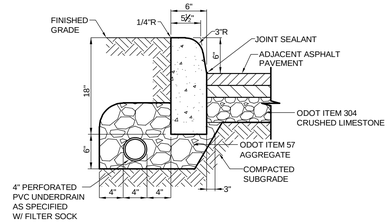
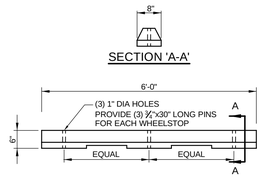


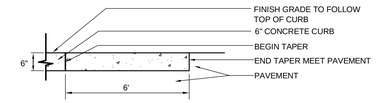
MULCH RING



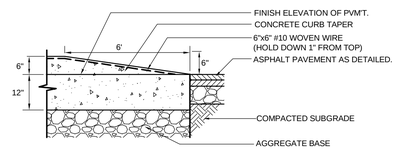
CONCRETE CURB
(ODOT TYPE 6
WITH UNDERDRAIN)



WHEELSTOP

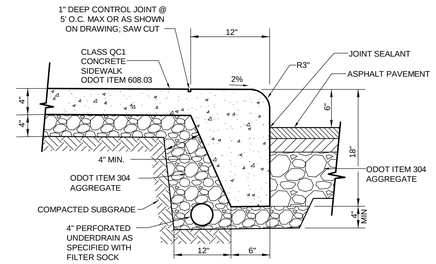


PLAN

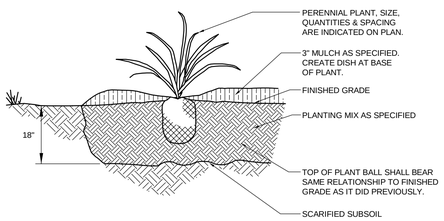


ELEVATION

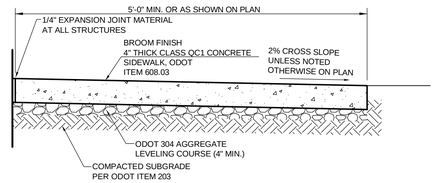
CONCRETE CURB TAPER



INTEGRAL CONCRETE CURB AND WALK
(WITH UNDERDRAIN)



PERENNIAL PLANTING DETAIL

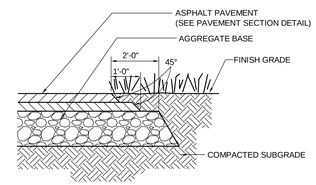


NOTE:
1. SURFACE TO BE SEALED PER ODOT ITEM 512.

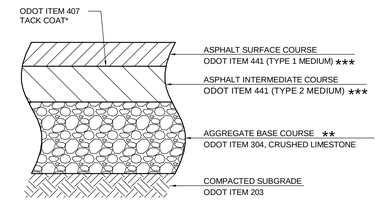
2. SLOPE OF SUBGRADE SHALL FOLLOW SAME SLOPE AS PAVEMENT ABOVE AS NOTED ON GRADING PLAN.

CONCRETE SIDEWALK

SECTION	SURFACE	INTERMED.	BASE
STANDARD	1.5"	3"	8"
HEAVY DUTY	1.5"	3.5"	10"



ASPHALT CONCRETE EDGE



SLAG IS NOT PERMITTED IN SURFACE OR INTERMEDIATE COURSES

★ TACK COAT ONLY REQUIRED WHEN SURFACE COURSE IS INSTALLED 24 HOURS OR MORE AFTER INTERMEDIATE COURSE.

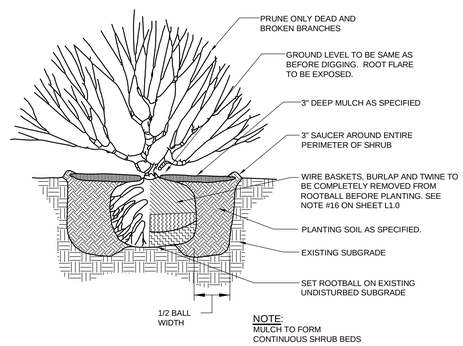
GEOTECHNICAL ENGINEER TO VERIFY DESIGN

NOTE: SLOPE OF SUBGRADE SHALL FOLLOW SAME SLOPE AS PAVEMENT ABOVE AS NOTED ON GRADING PLAN

★★ WHERE EXISTING AGGREGATE BASE IS TO REMAIN, SUPPLEMENT AND SHAPE AS NECESSARY, AND COMPACT. PROOF ROLL UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER.

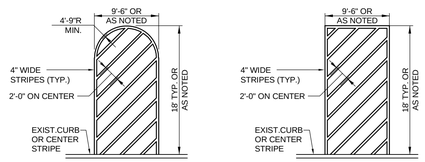
★★★ ACCEPTANCE CRITERIA PER ODOT 448

ASPHALT PAVEMENT DETAIL



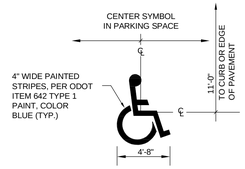
NOTE:
MULCH TO FORM CONTINUOUS SHRUB BEDS

SHRUB PLANTING DETAIL

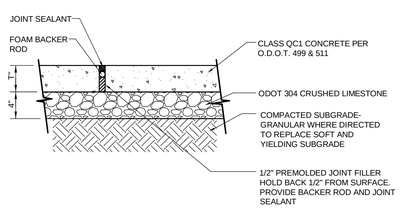


NOTES:
1. STRIPE COLOR TO BE WHITE OR MATCH OTHER PARKING SPACE STRIPING
2. IF NO CURB OR CENTER STRIPE, PAINT 4" STRIPE CONNECTING SIDE STRIPES; TERMINATE AT END OF PARKING STALL OR WHEELSTOP
3. PAINT TO BE PER ODOT ITEM 642 TYPE 1 PAINT

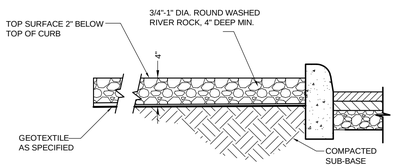
STRIPING DETAIL



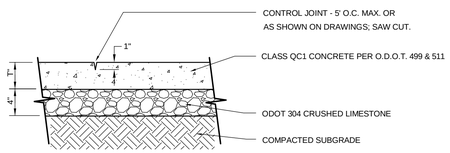
ACCESSIBLE SYMBOL DETAIL



EXPANSION JOINT



AGGREGATE PAVEMENT AT LIGHT POLES

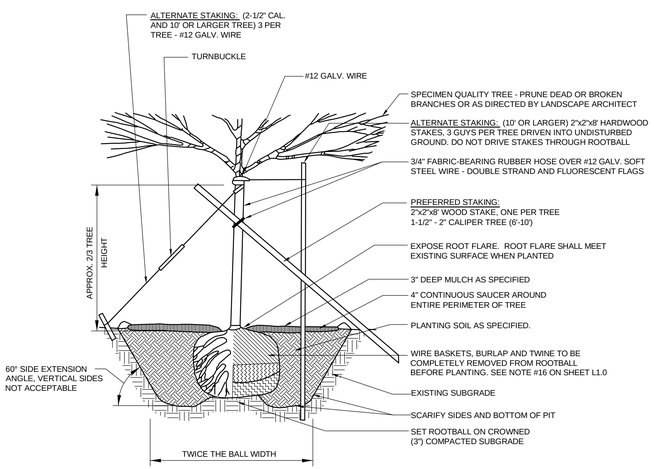


CONTROL JOINT

NOTES:

1. 1/2" PREMOLDED EXPANSION JOINT PER O.D.O.T. 705.03 - 40' O.C. MAX. OR AS SHOWN ON DRAWINGS AT ALL CURBS, WALKS, WALLS AND OTHER FIXED OBJECTS.
2. CONTROL JOINT - 5' 0.C. MAX. OR AS SHOWN ON DRAWINGS.
3. CROSS SLOPE AT 1/8" PER FOOT MIN. TO DRAIN.
4. USE EDGING TOOL AT PERIMETER.
5. SIDEWALK PER O.D.O.T. 608.03.
6. SURFACE TO BE SEALED PER ODOT ITEM 512.
7. SLOPE OF SUBGRADE SHALL FOLLOW SAME SLOPE AS PAVEMENT ABOVE AS NOTED ON GRADING PLAN.

PAVEMENT JOINTS



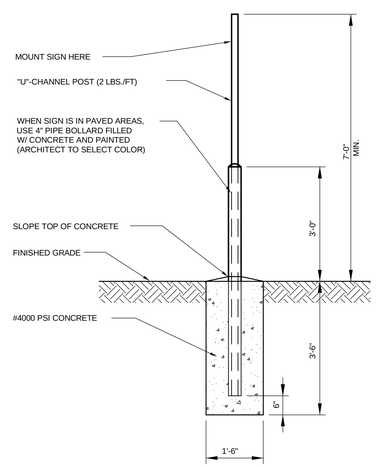
NOTES
EVERGREEN TREE PLANTING SIMILAR BUT TREE WRAP NOT REQUIRED. GUYING NOT REQUIRED FOR TREES UNDER 1½" CALIPER (6' HEIGHT) REMOVE GUYING, TREE WRAP, ETC. AFTER ONE GROWING SEASON

TREE PLANTING DETAIL

ALL SIGNS SHALL COMPLY WITH OHIO DEPARTMENT OF TRANSPORTATION, "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED.

THE SIGN SHEETING MATERIAL SHALL BE TYPE "G" REFLECTIVE SHEETING. ALL DIRECTIONAL SIGNAGE SHALL HAVE A 7'-0" CLEARANCE TO THE BASE.

MOUNT SIGN IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.



STANDARD SIGN BASE

R7-8
12x18

R7-8B
12x6
(SEE NOTE 5)

R7-H8B
12x6

NOTES:
1. SEE SITE LAYOUT PLAN FOR SIGN LOCATIONS. LOCATIONS TO BE FIELD VERIFIED.
2. SIGN SHALL BE SINGLE POST DESIGN.
3. SIGN POST SHALL BE U CHANNEL TYPE PER ODOT SECTION 730.015. DRAWING TC-41.20.
4. FIELD OF SIGNS SHALL BE BLUE RETROREFLECTIVE AND LEGEND SHALL BE WHITE RETROREFLECTIVE.
5. SEE PLAN FOR LOCATION OF VAN SPACE

ACCESSIBLE PARKING SIGNS

SITE DETAILS
N.T.S.

2 WORKING DAYS
BEFORE YOU DIG
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STATE OF OHIO
ROBERT J. HOWELL
E-51865
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SHEET ISSUE: FOR BIDS
ISSUE DATE: 12-20-23

MARK	DATE	DESCRIPTION

PROJECT NO: 2023-0668
ORIGINAL DATE: 06-23-2016

SITE DETAILS

C5.0

NOTES:

FRAME & GRATE SHALL BE CAST IRON, NEENAH No. R-3289-C, EAST JORDAN No. 7350 W/TYPE M6 GRATE & CURB PLATE OR APPROVED EQUIVALENT. INSTALL PER MANUFACTURER'S REQUIREMENTS.

CAST-IN-PLACE CURB INLETS SHALL HAVE 8" THICK WALLS.

PRECAST CURB INLETS ARE PERMITTED, EXCEPT FOR THE PAVEMENT BLOCKOUT. UNITS SHALL MEET THE REQUIREMENTS OF ASTM C 478. WALLS OF PRECAST CURB INLETS SHALL HAVE A 6" MIN. THICKNESS. REINFORCING SHALL BE SUFFICIENT TO PERMIT SHIPMENT AND PLACEMENT WITHOUT DAMAGE.

PIPE OPENINGS SHALL BE THE O.D. OF PIPE BEING CONNECTED PLUS 2" WHEN FABRICATED OR FIELD CUT. THE INTERSTITIAL SPACE SHALL BE FILLED WITH NON-SHRINK GROUT.

WHERE A SIDE OF THE CURB INLET BLOCKOUT IS ALIGNED WITH A PAVEMENT CONTRACTION JOINT (DESIRABLE), THE CONTRACTION JOINT SHALL BE CONTINUED, IN KIND, WITHIN THE LIMITS OF THE BLOCKOUT.

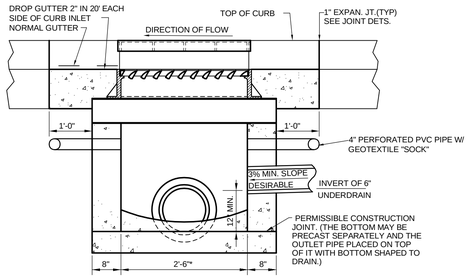
PAVEMENT BLOCKOUTS SHALL BE LOCATED NO CLOSER THAN 5' FROM THE NEAREST PAVEMENT JOINT. SEE BLOCKOUT DETAILS FOR ADDITIONAL INFORMATION.

WHERE THE CURB INLET WORK REQUIRES THE CONSTRUCTION OR RECONSTRUCTION OF BLOCKOUTS IN EXISTING PAVEMENT, THE BLOCKOUTS SHALL CONFORM, AS CLOSELY AS POSSIBLE, TO THE DETAILS SHOWN HEREON EXCEPT THAT THE DOWELS SHALL BE PLACED OR REPLACED IN ACCORDANCE WITH THE SECTION - TYPE X JOINT, PER SHOWN ON THE JOINT DETAILS.

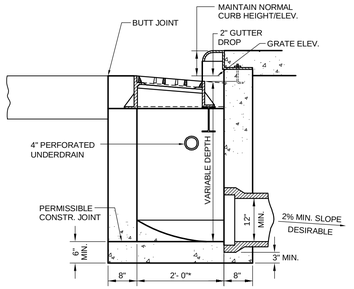
A CLASS C PORTLAND CEMENT CONCRETE APRON, THE SIZE OF THE GUTTER BLOCKOUT, SHALL BE PLACED IN FULL DEPTH FLEXIBLE PAVEMENTS. DOWELS ARE NOT REQUIRED FOR FLEXIBLE PAVEMENT JOINTS.

THE FOLLOWING SHALL BE CAST INTO THE TOP OF THE CURB CASTING: "DUMP NO WASTE" AND "DRAINS TO WATERWAY".

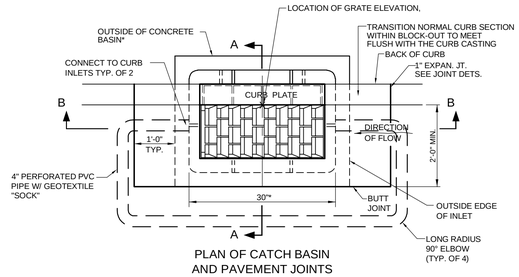
* COORDINATE BASIN SIZE WITH FRAME AND GRATE SELECTED.



SECTION B-B

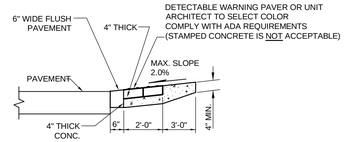


SECTION A-A



PLAN OF CATCH BASIN AND PAVEMENT JOINTS

VERTICAL CURB INLET DETAIL

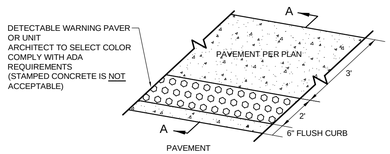


SECTION A-A

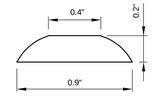
NOTES:

WHERE INDICATED ON THE PLANS AND/OR AS REQUIRED BY LOCAL ORDINANCES, PROVIDE DETECTABLE WARNING SURFACE. THE DETECTABLE WARNING STRIP:

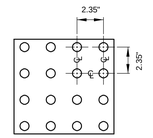
1. SHALL CONSIST OF PAVERS OR UNITS WITH RAISED TRUNCATED DOMES PER DETAIL. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
2. THERE SHALL BE A MINIMUM OF 70 PERCENT CONTRAST WITH ADJOINING SURFACES, EITHER LIGHT-TO-DARK OR DARK-TO-LIGHT. VISUAL CONTRAST SHALL BE MEASURED IN ACCORDANCE WITH EXISTING ADAAG, A4.2.9.2 APPENDIX.
3. THE TRUNCATED-DOME PAVER OR UNIT SHALL HAVE AN INTEGRAL COLOR TO BE SELECTED BY THE ARCHITECT.



PAVEMENT DETAIL



SECTION OF A TRUNCATED DOME ON A DETECTABLE WARNING PAVER OR UNIT. DRAWING SHOWS HEIGHT, TOP AND BOTTOM DIMENSIONS



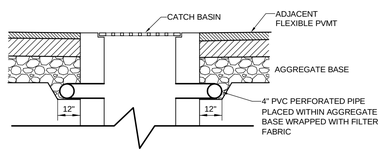
PLAN VIEW OF DETECTABLE WARNING SURFACE WITH TRUNCATED DOMES AND THEIR RELATIVE SPACING ON THE X AND Y AXIS. INSTALL ADJACENT UNITS SO THAT DOMES ALIGN.

DETAIL OF TRUNCATED DOMES DETECTABLE WARNING SURFACE

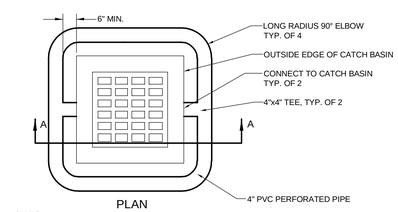
NOTES:

1. THERE SHALL BE A MINIMUM OF 70 PERCENT CONTRAST WITH ADJOINING SURFACES, EITHER LIGHT-TO-DARK OR DARK-TO-LIGHT. VISUAL CONTRAST SHALL BE MEASURED IN ACCORDANCE WITH EXISTING ADAAG, A4.2.9.2 APPENDIX.
2. AFTER CONCRETE BASE HAS CURED, INSTALL ADA COMPLIANT UNITS OR PAVERS PER MANUFACTURER'S RECOMMENDATIONS.
3. DETECTABLE WARNING SURFACE MUST EXTEND 36 INCHES BEHIND THE BACK OF CURB.

DETECTABLE WARNING STRIP AT FLUSH PAVEMENT RAMP TYPE 'I'



SECTION A-A



PLAN

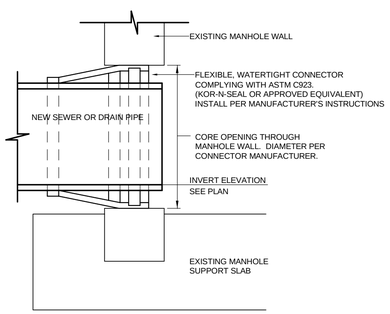
NOTES:

INSTALL UNDERDRAIN AT ALL CATCH BASINS IN PAVEMENT

PIPE MATERIAL SHALL BE PERFORATED PVC OR HPDE

INSTALL NONWOVEN NEEDLEPUNCH FILTER FABRIC WRAP, OR APPROVED EQUAL, AROUND ENTIRE PIPE.

CATCH BASIN UNDERDRAIN



CONNECTION TO EXISTING MANHOLE

DIMENSIONS			QUANTITIES ONE HEADWALL	
DIAMETER	H	L	CONCRETE CU. YDS.	REINFORCING STEEL LBS.
15"	5'-2"	7'-0"	1.7	41
18"	5'-5"	8'-4"	2.2	57
21"	5'-8"	9'-8"	2.8	62
24"	5'-11"	11'-0"	3.3	69
30"	6'-5"	13'-8"	4.7	92
36"	7'-0"	16'-4"	6.5	105

L CIRCULAR SECTIONS = 5D + Rt
L ELLIPTICAL OR PIPE-ARCH = 4Rt + 4t +3
H CIRCULAR SECTIONS = D + t + 44"
H ELLIPTICAL OR PIPE-ARCH = R + t + 44"

D= DIAMETER OF PIPE
R= RISE OF PIPE
S= SPAN OF PIPE
T= THICKNESS OF BARREL
L= LENGTH OF HEADWALL
H= HEIGHT OF HEADWALL

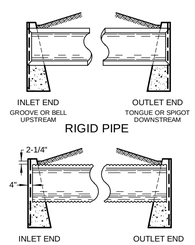
NOTES:

THIS HEADWALL WILL BE PROVIDED FOR NON SKEWED CULVERTS HAVING A DIAMETER OR RISE OF 36" OR LESS

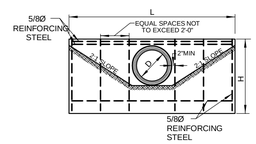
CONCRETE SHALL BE ODOT CLASS "C" REINFORCING STEEL BARS SHALL BE 5/8" ROUND.

DIMENSIONS AND QUANTITIES ARE SHOWN FOR CIRCULAR SECTIONS ONLY. IT WILL BE NECESSARY TO DETERMINE DIMENSIONS REQUIRED FOR REINFORCED ELLIPTICAL CONCRETE PIPE OR CORRUGATED METAL PIPE ARCHES IN ACCORDANCE WITH THE EQUATIONS LISTED ON THIS DRAWING. CHAMFER ALL EXPOSED CORNERS 3/4"

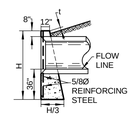
FOUNDATION: WHERE THE SOIL BORINGS INDICATE A BEARING CAPACITY OF LESS THAN 2600 POUNDS PER SQUARE INCH, IT WILL BE NECESSARY TO INCREASE THE WIDTH OF THE BASE.



CORRUGATED PIPE



ELEVATION



SECTION A-A

END TREATMENT AT HEADWALL

STANDARD No. 1 HEADWALL

SITE DETAILS
N.T.S.

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SHEET ISSUE: FOR BIDS
ISSUE DATE: 12-20-23

MARK	DATE	DESCRIPTION

PROJECT NO: 2023-0668
ORIGINAL DATE: 06-23-2016

SITE DETAILS

C5.1

CITY OF STOW RIGHT OF WAY SPECIFICATIONS

Items 27 & 221 – Topsoil, As Per Plan

This item shall include all necessary labor, materials, equipment, and incidentals as per ODOT Specification 659 and as per City of Stow specifications required to place topsoil in accordance with the CONTRACT DOCUMENTS. Topsoil shall not have any clumps greater than 3/8" and must be weed free. Topsoil must be placed by the same company at the same time seeding and mulching takes place.

Measurement for payment will be made on the actual amount of topsoil placed and accepted. Payment will be made at the unit price BID on a CY basis on the quantity determined from field measurements as specified above. Topsoil placed prior to three (3) days before the seeding and mulching operation will not be a pay item.

Items 28 & 222 – Seeding and Mulching, As Per Plan

This item shall include all necessary labor, materials, equipment, and incidentals as per ODOT Specification 659 and as per the City of Stow specifications required to seed and mulch the disturbed areas within the project limits in accordance with the CONTRACT DOCUMENTS.

The Contractor will place 2" of screened topsoil (pay item) over a minimum of 4" of compacted clean clay material (not a pay item, but required). Clay and topsoil must be free of debris, stone, gravel, glass, and clumps. The topsoil must have one hundred percent (100%) pass the 3/8" sieve and be free of weeds.

Acceptable Seeding Methods

Application of seed in two opposite directions to ensure even coverage of seed at a rate greater than manufacture's recommendations.

- Rake seed in top ¼" of soil by dragging with back side of leaf rake;
- Apply fertilizer 12-12-12 or 19-19-19; and
- Hydroseeding method may also be approved by the Project Engineer.

Acceptable Mulching Methods

- Application of straw by hand or mechanical operations;
- Hydromulch; and
- Penn Mulch (patching only).

Straw Must Be Tacked Down After Applications By:

- Organic liquid tackified;
- Conweb erosions (green) netting – staple down at intervals to hold down straw against wind and traffic and use biodegradable stakes; and
- Hydromulch tackifier over straw may also be acceptable if it remains in place.

If straw fails to stay in place, the Contractor will replace straw and tack down again without additional compensation.

This item also includes mowing, watering, and a second application of fertilizer four (4) to six (6) weeks after installation. The Contractor will repair seed and mulch as directed by the Engineer.

The Contractor will be required to weed and feed as directed by the Engineer. Payment for weed and feed will be at same unit price as fertilizer.

One of the following seed mixtures is required and the tags will be removed by the inspector:

- Oligers' Fairlawn Blend;
- Oligers' Fairlawn Blend Shady Mix; and
- Fescue "Plus" Mixture

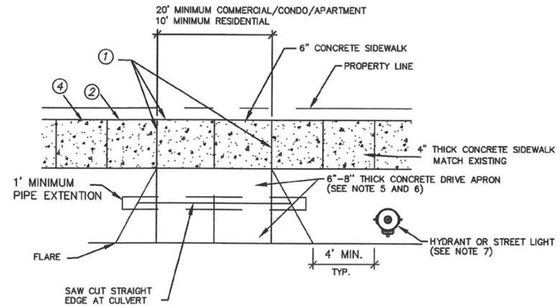
The grass seed mix will be approved by the Project Engineer prior to starting the seeding and mulching operation.

Measurement for payment will be made on the actual amount of seeding and mulching placed and accepted. Payment will be made at the unit price BID on a SY basis on the quantity determined from field measurements as specified above.

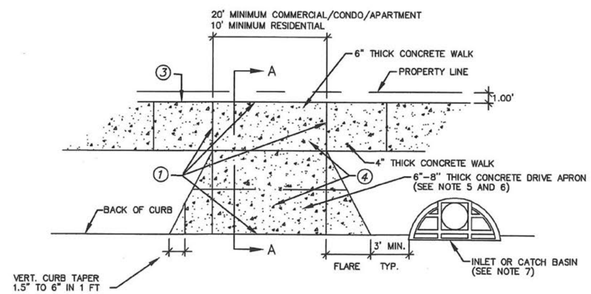
Item 29 – Repair Seeding and Mulching

This item shall include all necessary labor, materials, equipment, and incidentals as per ODOT Specification 659 and as per the City of Stow specifications required to repair seeding and mulching in the disturbed areas within the project limits in accordance with the CONTRACT DOCUMENTS.

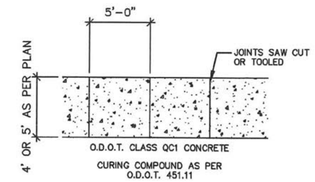
DRIVEWAY APPROACH AND SIDEWALK INSTALLATION



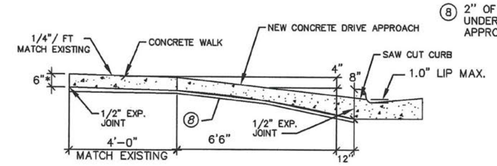
STREETS WITHOUT CURBS



STREETS WITH CURBS



STANDARD SIDEWALK SECTION



SECTION A-A
RESIDENTIAL

1. 1/2" EXPANSION JOINT
2. HEIGHT OF BACK EDGE OF WALK TO BE DETERMINED BY CITY ENGINEER.
3. BACK EDGE OF WALK 4" ABOVE TOP OF CURB FOR NEW INSTALLATIONS.
4. SIDEWALK AND/ OR APPROACH TO BE HARD TROWLED TO SMOOTH SURFACE, THEN BROOMED TO PRODUCE AN ABRASIVE FINISH. (NO COLORED CONCRETE)
5. ALL COMMERCIAL, CONDOMINIUM, AND APARTMENT DRIVEWAY APPROACHES AND SIDEWALK INSTALLATIONS SHALL BE 8" MIN. THICKNESS. WITH THE FLARE APPROVED ON THE SITE PLAN.
6. ALL RESIDENTIAL DRIVE APPROACHES AND SIDEWALK INSTALLATIONS SHALL BE 8" MINIMUM THICKNESS AT BACK OF CURB FOR 12" THEN TAPERED TO 6" AT SIDEWALK WITH A 3' STANDARD FLARE EACH SIDE. ON STREETS WITHOUT CURBS ANY FLARE GREATER THEN 3' MUST BE APPROVED BY THE CITY ENGINEER.
7. EDGE OF NEW DRIVEWAY APPROACH SHALL BE MINIMUM 4' TO ANY HYDRANTS OR STREET LIGHT AND MINIMUM 3' AWAY FROM ANY INLETS OR CATCH BASINS AS SHOWN.
8. 2" OF #57 LIMESTONE AGGREGATE BASE UNDER ALL SIDEWALK AND DRIVE APPROACHES.

**NOTE: THE SIDEWALKS ON STREETS WITHOUT CURBS MAY BE WAIVED BY THE SERVICE DIRECTOR AND CITY ENGINEER IF IT IS THE ONLY LOT ON AN EXISTING STREET WITHOUT ANY SIDEWALKS.

NOTE: NEW CONSTRUCTION–SEE SDR–2, SDR–3, AND SDR–3B

CITY OF STOW, OHIO
ENGINEERING DEPT.
CONSTRUCTION STANDARD

DRAWN BY:JHC DATE REVISED: 7/31/2023

CITY ENGINEER: James D. McCleary

DATE: 7/31/23

DWG FILE: SDR–6 N.T.S.

SITE NOTES & DETAILS
N.T.S.

2 WORKING DAYS BEFORE YOU DIG
CALL TOLL FREE: 800–362–2764
OHIO UTILITIES PROTECTION SERVICE

STATE OF OHIO
12/20/23
ROBERT J. HOWELL
E-51865
REGISTERED PROFESSIONAL ENGINEER

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STOW LIBRARY PARKING LOT
STOW-MUNROE FALLS PUBLIC LIBRARY
3512 DARROW ROAD, STOW, OHIO

SHEET ISSUE: FOR BIDS
ISSUE DATE: 12-20-23

MARK	DATE	DESCRIPTION

PROJECT NO: 2023-0668
ORIGINAL DATE: 06-23-2016

SITE NOTES & DETAILS

C5.2